

# **FACILITY CONDITION ASSESSMENT FORMAT**

## **Facility Condition Assessment Outline**

### **1. Facility Condition Assessment**

- 1.1 Facility Function and Description
  - 1.1.1 Architectural/Civil/Structural Systems
  - 1.1.2 Mechanical/HVAC Systems
  - 1.1.3 Electrical Systems
- 1.2 Site Plan
- 1.3 Floor Plan
- 1.4 FCA Procedure
  - 1.4.1 Scope and Purpose
  - 1.4.2 FCA Team Responsibilities
  - 1.4.3 Report Criteria
- 1.5 Overall Building Condition Ranking
- 1.6 Architectural FCA Findings
  - 1.6.1 Interior
  - 1.6.2 Exterior
  - 1.6.3 Roofs
  - 1.6.4 Civil
  - 1.6.5 Structural
- 1.7 Mechanical FCA Findings
  - 1.7.1 Pumps
  - 1.7.2 Shop Air Compressors
  - 1.7.3 Steam Stations
  - 1.7.4 Hot Water Converters
  - 1.7.5 Steam System Piping
  - 1.7.6 Hot Water Piping
  - 1.7.7 Potable Water Piping
  - 1.7.8 Doors
  - 1.7.9 Hoists and Cranes
  - 1.7.10 Elevators
  - 1.7.11 Sprinkler Systems
  - 1.7.12 Safety Shower/Eyewash Units
  - 1.7.13 Other Mechanical Equipment
- 1.8 HVAC FCA Findings
  - 1.8.1 Control Air Compressors
  - 1.8.2 Air Dryers
  - 1.8.3 Air Handling Units, Computer Room Units, DXAC Units, Heating Vent Units, Supply/Return Air Fans
  - 1.8.4 Chillers
  - 1.8.5 Cooling Towers
  - 1.8.6 Boilers
  - 1.8.7 Humidifiers
  - 1.8.8 Dehumidifiers
  - 1.8.9 Exhaust Fans

- 1.8.10 Unit Heaters
- 1.8.11 Vent Hoods
- 1.8.12 Dust Collector
- 1.8.13 Other HVAC Equipment

## 1.9 Electrical FCA Findings

- 1.9.1 Motor Control Centers
  - 1.9.2 Panel Boards
  - 1.9.3 Switchboards
  - 1.9.4 Manual Transfer Switches
  - 1.9.5 Automatic Transfer Switches
  - 1.9.6 Bypass Transfer Switches
  - 1.9.7 Field Interface Devices
  - 1.9.8 Fire Alarm System Control Panels
  - 1.9.9 Emergency Generators
  - 1.9.10 Emergency Lights
  - 1.9.11 Lightning Protection Systems
  - 1.9.12 Unit Power Centers
  - 1.9.13 Variable Frequency Drives
  - 1.9.14 Power Distribution Units
  - 1.9.15 Battery Banks
  - 1.9.16 Oxygen Detection Systems
  - 1.9.17 Carbon Dioxide Monitoring Systems
  - 1.9.18 Hydrogen Detection Systems
  - 1.9.19 Refrigerant Monitoring Systems
  - 1.9.20 Uninterruptible Power Supplies
  - 1.9.21 Other Electrical Equipment
- 1.10 Synopsis of FCA Actions and Recommendations
  - 1.11 Safety Impact from Failure of Equipment in **Poor/Replace** Condition
  - 1.12 Energy Recommendations
  - 1.13 Estimated Costs
  - 1.14 FCA Detail Summary

## 2. Reliability Centered Maintenance (RCM) Analysis

- 2.1 Description/General Function
- 2.2 Background
- 2.3 Electrical Systems
  - 2.3.1 Motor Control Centers
  - 2.3.2 Transformers
  - 2.3.3 Panel Boards
  - 2.3.4 Manual Transfer Switches
  - 2.3.5 Automatic Transfer Switches
  - 2.3.6 Bypass Transfer Switches
  - 2.3.7 Fire Alarm System Control Panels
  - 2.3.8 Emergency Generators

- 2.3.9 Emergency Lights
- 2.3.10 Lightning Protection Systems
- 2.3.11 Unit Power Centers
- 2.3.12 Variable Frequency Drives
- 2.3.13 Power Distribution Units
- 2.3.14 Battery Banks
- 2.3.15 Oxygen Detection Systems
- 2.3.16 Carbon Dioxide Monitoring Systems
- 2.3.17 Hydrogen Detection Systems
- 2.3.18 Refrigerant Monitoring Systems
- 2.3.19 Uninterruptible Power Supplies
- 2.3.20 Other Electrical Equipment
- 2.4 Mechanical/HVAC Equipment
  - 2.4.1 Air Compressors
  - 2.4.2 Air Dryers
  - 2.4.3 Air Handling Units, Computer Room Units, Heating Vent Units, DXAC Units, Supply/Return Air Fans
  - 2.4.4 Chillers
  - 2.4.5 Cooling Towers
  - 2.4.6 Boilers
  - 2.4.7 Humidifiers
  - 2.4.8 Dehumidifiers
  - 2.4.9 Exhaust Fans
  - 2.4.10 Vent Hoods
  - 2.4.11 Unit Heaters
  - 2.4.12 Steam System Piping
  - 2.4.13 Hot Water Piping
  - 2.4.14 Hot Water Converters
  - 2.4.15 Pumps
  - 2.4.16 Steam Stations
  - 2.4.17 Potable Water Piping
  - 2.4.18 Other Mechanical/HVAC Equipment
- 2.5 Miscellaneous Systems
  - 2.5.1 Doors
  - 2.5.2 Hoists and Cranes
  - 2.5.3 Elevators
  - 2.5.4 Sprinkler Systems
  - 2.5.5 Dust Collectors
  - 2.5.6 Refrigeration Units
  - 2.5.7 Roofs
  - 2.5.8 Safety Shower/Eyewash Units
  - 2.5.9 Other Miscellaneous Equipment

### **3. Appendix**